



# UNITED STATES PATENT AND TRADEMARK OFFICE

58  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,046	10/17/2001	Joseph G. Barrett	06975-132002	3693

26171 7590 01/10/2005

FISH & RICHARDSON P.C.  
1425 K STREET, N.W.  
11TH FLOOR  
WASHINGTON, DC 20005-3500

EXAMINER

EDELMAN, BRADLEY E

ART UNIT	PAPER NUMBER
----------	--------------

2153

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/978,046

Applicant(s)

BARRETT ET AL.

Examiner

Bradley Edelman

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-74 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/3/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office action is in response to Applicant's arguments filed on November 23, 2004. Claims 1-74 are presented for examination. No amendments have been made. This Office action is non-final due to the new grounds for rejection under 35 USC 101.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 34-74 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claim 34, Applicant claims "a computer readable medium or propagated signal." Neither of these are disclosed in the specification as specifically being on a tangible medium. Thus, claim 34, which could encompass a signal moving through the air, is directed toward non-statutory subject matter.

Claims 35-69 depend from claim 34, and also only require a "computer readable medium" but do not require a tangible medium. Therefore, these claims are rejected for the same reasons as claim 34.

Regarding claim 70, Applicant claims "a unit of electronic data." This is not a process, manufacture, machine, or composition of matter, and is thus non-statutory.

Claims 71-74 depend from claim 70 and are rejected for the same reason.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-7, 10-17, 19, 20, 22-25, 31-40, 45-53, 55, 56, 58-61, and 68-72 are rejected under 35 U.S.C. 102(e) as being anticipated by Paul (U.S. Patent No. 6,052,709).

In considering claim 1, Paul discloses a method for communicating electronic data in a manner that identifies the sender, including:

Receiving electronic data from an intermediary ("server") located between a sender and an intended recipient of the electronic data, identifying the sender at the intermediary, changing the electronic data to reflect information identifying the sender (i.e. adding the word "JUNK") based on the identifying performed at the intermediary, and forwarding the changed electronic data to the intended recipient (col. 8, lines 55-65).

In considering claim 2, Paul further discloses that the sender is not a host (i.e. the sender is just a regular e-mail sender).

Art Unit: 2153

In considering claim 3, Paul further discloses that information identifying the sender comprises at least an IP address ("IP address," col. 5, lines 12-13).

In considering claim 4, Paul further discloses that information identifying the sender comprises more than an IP address ("MESSAGE ID," col. 5, lines 12-13, 18-19).

In considering claim 5, Paul further discloses that information identifying the sender comprises a screen name ("MESSAGE ID" address or "FROM" header will be a screen name; col. 5, lines, 18-19; col. 8, lines 55-60).

In considering claim 6, Paul further discloses that information identifying the sender comprises account information (the "MESSAGE ID" or "FROM" header will include account information; col. 5, lines, 18-19; col. 8, lines 55-60).

In considering claim 7, Paul further discloses that information identifying the sender comprises information identifying a person (i.e. "MESSAGE ID" or "FROM" header).

In considering claim 10, Paul further discloses that the electronic data is e-mail.

In considering claim 11, Paul further discloses that identifying the sender comprises:

Determining an address from which the electronic data is received ("FROM" address or IP address); and

Determining an identifier for the sender ("JUNK") based on the address from which the electronic data is received,

Wherein the information includes the identifier such that the forwarding comprises forwarding the electronic data along with the identifier for the sender (col. 8, lines 55-65).

In considering claim 12, Paul further discloses that determining an address comprises determining an IP address ("IP address").

In considering claim 13, Paul further discloses that the identifier is a user-defined identifier based on the address from which the electronic data is received (col. 9, lines 42-57, wherein the user can set the filters).

In considering claim 14, Paul further discloses that the user-defined identifier can be a screen name corresponding to the sender ("source," wherein the "source" may be the "FROM" field in the header).

In considering claim 15, Paul further discloses that changing the electronic data comprises appending to the electronic data the information identifying the sender, and forwarding the changed electronic data comprises forwarding the electronic data along

Art Unit: 2153

with the appended information (col. 5, lines 33-45, wherein "JUNK" is added to the message and is sent with the data).

In considering claim 16, Paul further discloses that appending the information identifying the sender includes appending the information identifying the sender as a header to the electronic data (col. 7, lines 3-5, "inserting the word 'JUNK' at the beginning of the message's 'SUBJECT' header field").

In considering claim 17, Paul further discloses:

Determining whether the electronic data received from the sender has characteristics of a message to be blocked (col. 6, lines 45-58, describing detecting the "FROM" field, among others); and

Blocking the electronic data when the electronic data is determined to have characteristics of a message to be blocked (col. 6, line 59 – col. 7, line 1, wherein messages from particular senders are marked as "JUNK" and are automatically discarded);

Wherein forwarding at least a selected portion of the changed electronic data comprises forwarding the changed electronic data that is not determined to have characteristics of a message to be blocked (same sections, wherein messages labeled as "JUNK" can still be delivered and are appended with the label "JUNK").

In considering claim 19, Paul further discloses that determining whether the electronic data has data characteristics of a message to be blocked comprises determining whether the electronic data has characteristics of a message to be blocked based upon a data packet (i.e. IP Address, col. 5, lines 10-15).

In considering claim 20, Paul further discloses that determining whether the electronic data has data characteristics of a message to be blocked comprises determining whether the electronic data has characteristics of a message to be blocked based upon the identification of the sender (i.e. IP Address of the sender, col. 5, lines 10-15).

In considering claim 22, Paul further discloses blocking the electronic data based upon a data packet (i.e. the address and other information found in the packet, col. 5, lines 10-20).

In considering claim 23, Paul further discloses blocking the electronic data based upon the identification of a sender (i.e. the IP address of the sender, col. 5, lines 10-20).

In considering claim 24, Paul further discloses determining whether the electronic data relates to undesirable news postings ("pornographic subject matter") such that data having characteristics of undesirable news postings is blocked (col. 9, lines 49-53; col. 6, line 67 – col. 7, line 1).



In considering claim 25, Paul further discloses determining whether the electronic data has characteristics of spam ("spam") such that data having characteristics of spam is blocked (col. 6, line 45 – col. 7, line 1).

In considering claim 31, Paul further discloses that identifying the sender includes identifying an initial source that generated the electronic data ("IP address of the sender," col. 5, lines 10-15).

In considering claim 32, Paul further discloses redirecting the received electronic data from the intended recipient to a computing device capable of performing at least the identifying ("e-mail filter 504" and "exclusion list processor 502," col. 8, lines 19-26, 44-60).

In considering claim 33, Paul further discloses changing a destination address associated with the received electronic data from the intended recipient to the computing device (inherent in the process of sending it to the processor and e-mail store).

Claims 34-40, 46-53, 55-56, 58-61, and 68-69 contain a computer readable medium for performing the same method described in respective claims 1-7, 10-17, 19-20, 22-25, and 32-33 and are thus rejected for the same reasons.

Claim 45 presents a computer readable medium for performing the same method as claim 11, except it adds that the address from which the electronic data is received is not an IP address. Paul further discloses this on col. 8, lines 55-65 ("FROM" header field, which will include a non-IP address).

In considering claim 70, Paul discloses a unit of electronic data ("e-mail") comprising:

- A content area ("HEADER") including information communicated by a sender and intended for a designated recipient; and

- An identifier ("JUNK") appended to the content area that identifies at least the sender,

- Wherein the identifier includes information that renders the identity of the sender immediately recognizable (i.e. a junk-mail sender) to the designated recipient (col. 7, lines 1-15).

In considering claim 71, Paul further discloses that the identifier includes identifying information that is based on an address associated with the sender ("IP address").

In considering claim 72, Paul further discloses that the identifier further includes identifying information other than location information (i.e. "JUNK").

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8, 9, 18, 21, 41-44, 54, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul, in view of Venkatachary et al. (U.S. Patent No. 6,212,184, hereinafter "Venkatachary").

In considering claims 8, 18, 21, 41, 43, 44, 54, and 57, although the system taught by Paul discloses substantial features of the claimed invention, it does not describe that the intermediary or its components comprise a layer 4 redirection program. Nonetheless, it would be desirable to implement the redirection program on the lowest layer possible, because processing at a lower layer will take less time than processing at the application layer. Furthermore, the use of layer 4 redirection in an e-mail message filtering system is well known, as evidenced by Venkatachary (see col. 6, lines 42-60, and col. 6, lines 16-49, giving an overview of the layer 4 message filtering system). Thus, it would have been obvious to a person having ordinary skill in the art to use layer 4 redirection for the message filtering system taught by Paul, in order to provide a faster message processing system.

In considering claims 9 and 42, the layer 4 redirection system taught by Venkatachary identifies senders based on the data packets examined (col. 6, lines 32-41; col. 8, lines 38-49, describing examining the packet for different fields, including a source address).

4. Claims 26-30 and 62-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul, in view of Aronson et al. (U.S. Patent No. 6,654,787, hereinafter "Aronson").

Note that Aronson discloses an e-mail filtering system that can be used in combination with the system taught by Paul (see Aronson, col. 4, lines 45-56).

In considering claim 26, Aronson discloses an additional way to determine whether electronic data has characteristics of spam by counting the number of connections that are made by the sender (col. 5, lines 59-60, "IP source frequency analysis"). Thus, given this knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of determining to block the spam in the system taught by Paul by counting the sender connection frequency, and blocking spam after the frequency rises above a threshold. Such a technique would have been obvious to use to detect spam in the system taught by Paul, because once spam is sent in massive numbers across the Internet, it begins to degrade network performance and clog users' e-mail boxes.

Although Aronson discloses counting connection frequency, it does not describe counting a number of open connections. Nonetheless, Examiner takes official notice

Art Unit: 2153

that sending spam over open connections, such as over chat rooms or instant messaging applications, is well known in the art. Given this knowledge, it would have been obvious to a person having ordinary skill in the art to use the techniques taught by Aronson and Paul to prevent spamming on chat room systems by counting the number of open spam connections, in order to reduce the number of dissatisfied customers who use chat services.

In considering claim 27, it would have been further obvious to allow the frequency analysis taught by Paul and Aronson to be configurable, to allow an administrator to select when he or she thinks a spammer has become dangerous towards the network.

In considering claim 28, Aronson further discloses blocking future electronic data from the sender for at least a period of time when the electronic data is determined to have characteristics of a message to be blocked (col. 6, lines 31-37, describing that filters can last for certain periods of time). Given this teaching, it would have been obvious to a person having ordinary skill in the art to block spammers for only temporary periods of time, to avoid building an unmanageable number of filters (see Aronson, col. 6, lines 39-43).

In considering claim 29, Aronson discloses an additional way to determine whether electronic data has characteristics of spam by counting the number of

Art Unit: 2153

communications of electronic data that have been received from the sender during a period of time (col. 5, lines 59-60, "IP source frequency analysis"). Thus, given this knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of determining to block the spam in the system taught by Paul by counting the sender communication frequency, and blocking spam after the frequency rises above a threshold. Such a technique would have been obvious to use to detect spam in the system taught by Paul, because once spam is sent in massive numbers across the Internet, it begins to degrade network performance and clog users' e-mail boxes.

In considering claim 30, although Aronson does not describe the period of time in great detail (it is simply inherent that the analysis will span some period of time), it would have been obvious to allow the time period to be configurable, so that an administrator could select when he or she thinks is a reasonable period of time in which repeated messages sent by a single sender could constitute spam.

Claims 62-65, and 67 describe a computer readable medium for performing the same method as respective claims 26-29 and 30, and are thus rejected for the same reasons.

In considering claim 66, it would have been further obvious to allow the frequency analysis taught by Paul and Aronson to be configurable, to allow an

Art Unit: 2153

administrator to select when he or she thinks a spammer has become dangerous towards the network.

5. Claims 73 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul.

In considering claim 73, although the system taught by Paul discloses that the identifier can be desired word or code (col. 5, lines 40-43), it does not disclose that the identifier specifically includes a screen name for the sender. Nonetheless, Paul discloses that the sender address is stored as being associated with the spammer (col. 5, lines 10-32, describing creation of the spam filters). Thus, given this knowledge, a person having ordinary skill in the art would have readily recognized the desirability and advantages of appending the actual sender screen name to the electronic message, in order to further discourage spammers from getting caught, and to also better inform the recipient as to whether the message is truly spam. Therefore, it would have been obvious to append the screen name taught by Paul to the spam messages, in the system taught by Paul.

In considering claim 74, an identifier including a screen name would necessarily include account information, and thus claim 74 is rejected for the same reasons as claim 73.

***Response to Arguments***

Applicant's arguments filed on November 23, 2004 have been fully considered but they are not persuasive.

Applicant has made the following arguments:

- a. Paul does not describe or suggest identifying the sender of the e-mail, as recited in claims 1, 34, and 70.
- b. Marking the e-mails described in Paul as "JUNK" does not meet the claim limitations of "changing the electronic data to reflect information identifying the sender" in claims 1 and 34, or "an identifier appended to the content area that identifies at least the sender" as recited in claim 70.

Regarding (a), Applicant contends that Paul does not describe or suggest identifying the sending of the e-mail, as recited in claims 1, 34, and 70. Examiner respectfully disagrees with this assertion. Notably, Paul explicitly discloses identifying the sender in column 8, lines 55-65, which states "the filter 504 compares the data stored in the 'FROM' header... of the incoming e-mail messages with corresponding categories of data stored in the exclusion list processor 502. If no match is detected, the e-mail filter labels the e-mail message as 'JUNK' by marking the message...." Column 9, lines 13-16 further clarifies that the "exclusion list" consists of e-mail addresses: "The exclusion list processor 502 may store an exclusion list for each e-mail address, or alternatively, an exclusion list for each group of e-mail addresses." Therefore, Paul identifies the sender of the e-mails, as claimed.



Regarding (b), Applicant contends that marking the e-mails described in Paul as "JUNK" does not meet the claim limitations of "changing the electronic data to reflect information identifying the sender" in claims 1 and 34, or "an identifier appended to the content area that identifies at least the sender" as recited in claim 70. Examiner respectfully disagrees.

First, regarding claims 1 and 34, the claims only require "changing the electronic data *to reflect* information identifying the sender" (emphasis added). Adding the word "JUNK" to a message based on the sender's e-mail, as taught by Paul address certainly reflects information identifying the sender (i.e. it reflects the sender's address). Thus, Paul anticipates claims 1 and 34.

Second, regarding claim 70, the claim only requires "an identifier that identifies at least the sender." The claim does not say what the identifier is. It could therefore be any object that identifies a sender. In Paul, the word "JUNK" identifies the sender as a spammer. Therefore, Paul discloses the features appending an identifier that identifies the sender. In fact, Applicant's specification supports such an interpretation of the term "identifier." See p. 22, lines 18-20, describing that "identifier information may be added or appended to the electronic data to transform the electronic data into an electronic data unit such as that described with respect to Fig. 10," wherein Fig. 10 describes the identifier as the phrase "X apparently from." Thus, Applicant's argument that the word "JUNK" does not identify a sender of a message directly contradicts Applicant's example of an identifier in Applicant's specification. For these reasons, Examiner

Art Unit: 2153

maintains that Paul discloses an "identifier," as claimed in claim 70, and thus anticipates the claim.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Edelman whose telephone number is (703) 306-3041. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (703) 305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

For all correspondences: (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

*Bradley Edelman*

BE

January 5, 2005